MATH 2411-001: CALCULUS 2 [4 cred. hrs.]

DEPARTMENT OF MATHEMATICAL & STATISTICAL SCIENCES

COLLEGE OF LIBERAL ARTS AND SCIENCES (CLAS)

UNIVERSITY OF COLORADO DENVER [DENVER CAMPUS]

COURSE SYLLABUS FOR SPRING 2018 SEMESTER

- Instructor: Mike Kawai, MERC Lab Director
 If you have a specific complaint concerning this course, then please talk to me FIRST.
 If you are not comfortable doing this, then contact the Assoc. Chair,
 Prof. Stephen Billups (<u>stephen.billups@ucdenver.edu</u>). See him in person.
- 2. E-mail: mike.kawai@ucdenver.edu
- 3. **Time & Location:** Monday/Wednesday 8:00am to 9:50pm in North Classroom Bldg. NC1405.
- Office Hours: Monday/Wednesday 7:30am-8:00am in our classroom and 10:00am-10:30am in the MERC Lab (NC 4013). Other times by appointment only.
- 5. Required MyMathLab Course ID: kawai28787

IF YOU USED THIS TEXT IN A PREVIOUS SEMESTER, THEN YOU SHOULD NOT NEED TO BUY A NEW SUBSCRIPTION. I can probably fix this, so see me soon. If you can complete this course WITHOUT A PAPER COPY OF OUR TEXTBOOK, then, by all means, just buy the MyMathLab.com subscription for this course. The .pdf copy of the textbook is contained within the subscription. The current price on-line is approx. \$100. It is possible that you could pick up an UNUSED student access kit for around \$80 through Amazon.com. BE CAREFUL. Do not buy a used card, obviously. More on this later.

IMPORTANT: You MUST be registered in MyMathLab by Thursday, September 28th. If not, then you are essentially throwing away 10% of your course grade.

Hint: You can register for the course using a FREE TEMPORARY SUBSCRIPTION that will last for approx. TWO WEEKS. If you don't eventually pay for the full subscription, you will lose all your work.

6. **Catalog Description:** The second of a three-semester sequence in Calculus (MATH 1401, 2411 and 2421). Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series.

THIS COURSE CAN BE APPLIED TO THE UCD CORE REQUIREMENTS FOR MATHEMATICS.

- 7. **Course Description:** This is a "general" Calculus 2 course. It must cover a wide range of topics applicable to engineering (primarily), physics, chemistry, mathematics, and economics. We want you to see that much of the material is merely an extension of topics that you've already learned in Calculus 1!
- 8. **Course Prerequisites:** Calculus 1. You must (today!) have a good working knowledge of single-variable function differentiation and the Fundamental Theorem of Calculus for evaluating definite integrals.
- 9. **Syllabus Revisions:** In general, syllabi should not be changed once the semester begins, though unforeseen circumstances may lead to changes. Students will be notified in a timely manner in writing (via email/Canvas, etc.) of any changes to the syllabus.

General Information (provided by the Course Captain)

10. Course Goals

- (a) To understand the process of integration and its related applications.
- (b) To understand how this is applied to Physics, Engineering, and related sciences.

11. Learning Outcomes

These will be attached to the end of this syllabus.

12. Single Variable Calculus, 2nd Ed., Briggs/Cochran et al.

[Paperback ISBN-13 = 978-0-321-95423-7].

You WILL ALSO NEED a MyMathLab subscription. This may be included in the commercial packages.

If you feel that you do NOT need a paper copy of the text, then you can just buy the MyMathLab (MML) subscription from Pearson (see below).

13. **Technology:** A TI-84 is helpful for checking boardwork, but we do not use them on quizzes or tests.

14. Grading:

	Percent Weight
MyMathLab	10%
Quizzes	15%
Test #1	25%
Test #2	25%
Uniform Final	25%

Here is the course grade percentage scale:

92.0 or more	= A
89.0 - 91.9	= A -
86.0 - 88.9	= B +
82.0 - 85.9	= B
79.0 - 81.9	= B -
76.0 - 78.9	= C +
69.0 - 75.9	= C
55.0 - 68.9	= D
Below 55.0	= F

15. Accounting:

The official accounting for your course grade is performed in your Canvas account.

Inside of MyMathLab.com, you will eventually see an overall percentage grade for MML. That will be transferred to Canvas for your final accounting.

16. MyMathLab Homework (On-line)

- (a) If you don't do this, then you are throwing away 10% of your course grade!
- (b) You will need a MyMathLab (MML) access kit for this course. If you had MML with this textbook (Briggs, 2nd Edition), then you do NOT need to buy MML again.

If you believe your subscription should be extended and MML does not recognize this, then contact Mike Kawai.

- (c) MML subscriptions cannot be shared between students.
- (d) We will give you the info sheet which has the correct MML CourseID. If you only want to register in MML, then, theoretically, you do NOT need to buy a hardcopy of the text. There is a digital version embedded in MML. The subscription is available on the mymathlab.com website when you go to register for the MML course.
- (e) The due dates will be given inside MML.

17. The Three Tests

- (a) We will hand out Test Reviews approximately one week before each test. You will also get a copy of the note sheet that can be used during the test.
- (b) No calculators are used on tests.
- (c) You will have about 110 minutes to complete the test.
- (d) TEST #1: Wednesday, 21 February. TEST #2: Monday, 9 April. Uniform Final: 9am to 12n on Saturday, 5 May.
- (e) MAKE PLANS **NOW** to reserve time for our Uniform Final Saturday!

If you work on Saturdays, then ask for the day off NOW! Work is not an excuse for delaying the Final Exam. The Uniform Final date was posted on the Student Portal when you registered for this course!

We will reschedule students who have another Final Exam on that Saturday.

18. Written Feeback Objects

- (a) Our department requires some amount of written feedback to you, the student. This can take the form of written homework, in-class quizzes, or a small analysis project.
- (b) You should plan on completing 16 (or so) written activities. We will drop the TWO lowest scores.
- (c) The point of completing shorter written homework assignments is that you need practice writing EXPLANATIONS as well as correctly manipulating algebra.
 Due dates will be assigned by your instructor.
- (d) You will receive homework forms. First, figure everything out on scratch paper and THEN copy your responses into the available whitespace on the forms.If it all doesn't fit, then you should probably rethink your methods.
- (e) The important thing is: WRITE MORE EXPLANATIONS not a bunch of sprawling algebra.

- (f) YOU MUST USE ENGINEERING PAD PAPER (not regular graph paper!). Please pick up a small pad at the Bookstore!
- (g) In general: NO LATE HOMEWORK. If you email me PRIOR to the session that it is due and explain your situation, then I will consider an extension (minimum 50% penalty). Do not count on receiving one.
- (h) If it is a quiz (approx. 15 minutes), then I will disclose the subject matter of the quiz during the lecture before the quiz.

19. General Policy on Make-ups

If you contact me BEFORE the item is due, then I will tend to be much more flexible on make-ups. If you contact me AFTER THE FACT, then, at a minimum, you must provide appropriate documentation that shows that your ability to complete the item was out of your control.

- 20. Drops & Incompletes: You have until 11:59pm on Sunday, 1 April 2018 to drop this course without the instructor's signature. After that, up until 5:00pm on Wednesday, 2 May 2018, you may file a LATE WITHDRAWAL petition to CLAS Advising with your instructor's signature. (There is no guarantee that your petition will be granted, so be careful.) The incomplete policy of the department and college is strictly enforced. Incomplete grades (I) are NOT granted for low academic performance. To be eligible for an incomplete grade, a student MUST been ALL of the following requirements:
 - (a) The student successfully completed a minimum of 75% of the course.
 - (b) There were special circumstances beyond the student's control that precluded the student from attending class and completing the course. Verification of these special circumstances is required.
 - (c) The student has made arrangements to complete the missing coursework with the *original* instructor via a CLAS Course Completion Agreement.The Course Completion Agreement is available from the CLAS Advising Office or from the Department of Mathematical Sciences (4th floor of SCB).
- 21. **Religious Holiday Accomodations:** You must inform me at the beginning of this semester, in order for me to accomodate any rescheduling of your coursework.
- 22. **Disability Accomodations**: To be eligible for accomodations, students *must* be registered with the UCD Office of Disability Resources and Services (DRS). The office is located at Room 2116 of Student Commons (SCB). Faculty cannot arbitrarily decide to give a student extra time, extra assistance, or other forms of aid unless it is formally mandated by the DRS.

23. University-wide Policy Links:

- (a) Student Code of Conduct: ucdenver.edu/life/services/standards/pages/default.aspx
- (b) Accommodations: ucdenver.edu/student-services/resources/disability-resources-services/ accommodations/Pages/accommodations.aspx
- (c) Academic Freedom: ucdenver.edu/policy/pages/academic-Freedom.aspx

- (d) Family Educational Rights and Privacy Act (FERPA) www.cu.edu/university-relations/ferpa-and-hipaa-guidelines
- (e) Discrimination and Harassment Policy and Procedures ucdenver.edu/policy/TitleIX/Pages/default.aspx
- (f) Grade Appeal Policy ucdenver.edu/policy/Documents/Process-for-Grade-Issues.pdf

24. Academic Dishonesty:

Student Code of Conduct: Students are expected to know, understand, and comply with the ethical standards of the university, including rules against plagiarism, cheating, fabrication and falsification, multiple submissions, misuse of academic materials, and complicity in academic dishonesty. For suggestions on ways to avoid academic dishonesty, please see the Academic Honesty Handbook:

http://www.ucdenver.edu/faculty_staff/faculty/center-for-faculty-development/ Documents/academic honesty.pdf

- (a) Plagiarism is the use of another person's ideas or words without acknowledgement. The incorporation of another person's work into yours requires appropriate identification and acknowledgement. Examples of plagiarism when the source is not noted include: word-for-word copying of another person's ideas or words; the "mosaic" (interspersing your own words here and there while, in essence, copying another's work); the paraphrase (the rewriting of another's work, while still using their basic ideas or theories); fabrication (inventing or counterfeiting sources); submission of another's work as your own; and neglecting quotation marks when including direct quotes, even on material that is otherwise acknowledge.
- (b) Cheating involves the possession, communication, or use of information, materials, notes, study aids, or other devices and rubrics not specifically authorized by the course instructor in any academic exercise, or unauthorized communication with any other person during an academic exercise. Examples of cheating include: copying from another's work or receiving unauthorized assistance from another; using a calculator, computer, or the internet when its use has been precluded; collaborating with another or others without the consent of the instructor; submitting another's work as one's own.
- (c) Multiple submissions involves submitting academic work in a current course when academic credit for the work was previously earned in another course, when such submission is made without the current course instructor's authorization.
- (d) Misuse of academic materials includes: theft/destruction of library or reference materials or computer programs; theft/destruction of another student's notes or materials; unauthorized possession of another student's notes or materials; theft/destruction of examinations, papers, or assignments; unauthorized assistance in locating/using sources of information when forbidden or not authorized by the instructor; unauthorized possession, disposition, or use of examinations or answer keys; unauthorized alteration, forgery, fabrication, or falsification of academic records; unauthorized sale or purchase of examinations, papers, or assignments.
- (e) Complicity in academic dishonesty involves knowingly contributing to or cooperating with another's act(s) of academic dishonesty.

If you are convicted of academic dishonesty, then you will receive a score of zero on the specific activity, and possibly, a course grade of "F" and/or expulsion from the University.



Spring 2018 CLAS Policies and Deadlines

CLAS Academic Advising Office • NC1030 • 303-315-7100

Academic Policies

The following policies, procedures, and deadlines pertain to all students taking courses in the College of Liberal Arts and Sciences (CLAS). They are aligned with the Official University Academic Calendar found on the <u>Reaistrar's website</u>.

Schedule Verification

It is each student's responsibility to verify that their official registration and schedule of courses is correct in UCDAccess (*not* Canvas) before courses begin and by the university census date. Failure to verify schedule accuracy is not sufficient reason to justify post-census date adds. Access to a course through Canvas is not evidence of official enrollment.

Email

Students must activate and regularly check their official CU Denver email account for university related messages. Note: Canvas is not the location to access your CU Denver email account. Log into http://www.ucdenver.edu/email/Pages/login.aspx

Administrative Drops

Students may be administratively dropped if they do not meet the pre- and/or co-requisites for a course as detailed in the UCDAccess registration system. Students may also be administratively dropped from a course if the course syllabus articulates attendance expectations prior to census date and they do not meet those attendance expectations. Please note: this procedure does not apply to all courses and students should not rely upon it; if students plan to no longer complete a course, they are responsible to drop or withdraw from the course.

Post-Census Date Adds and Late Withdrawals

Post-census date adds (i.e., adding a course after census date) require a written petition, verifiable documentation, and dean's approval via CLAS Advising. Late withdrawals (i.e., withdrawing from one or more full-semester courses after the withdrawal deadline but before the late withdrawal deadline) require a <u>Late Withdrawal Petition</u> submitted to CLAS Advising (NC 1030 – 303-315-7100). If petitioning to late-withdraw from individual courses, instructor signatures are required. If petitioning to late-withdraw from the entire semester, instructor signatures are not required. Contact CLAS Advising (NC 1030 – 303-315-7100) for more information on post-census date adds and late withdrawals.

Co-Requisites and Drops/Withdrawals

deadline but before the late withdrawal deadline

Students dropping a course with co-requisite(s) before or by census date must drop the course and co-requisite(s). After census date, students withdrawing from a course with co-requisite(s) before or by the withdrawal deadline must withdraw from the course and co-requisite(s). After the withdrawal deadline, until the late withdrawal deadline, students may be able to withdraw from a course or co-requisite(s) based on instructor permission and approval of a <u>Late Withdrawal Petition</u>.

Waitlists

The Office of the Registrar notifies students via their CU Denver email account if they are added to a course from a waitlist. Students will have access to Canvas when they are on a waitlist, but this does not indicate that the student is officially enrolled or guaranteed a seat in the course. If a student is not enrolled in a course after waitlists are purged, instructor permission is required for the student to enroll in the course. The student must complete a Late Add Form and submit it to the Registrar's Office (SCB 5005) by census date in order to enroll in the course.

Applicable Fe	orms	
Schedule Adjustment Form	Submit to Registrar (SCB 5005)	
Purpose:	Approval Signatures Required:	Dates:
Receive an academic overload	Student and CLAS Advising signatures	before Jan. 31 (5pm)
Receive a time conflict override	Student and instructor signatures	before Jan. 31 (5pm)
Designate a course pass/fail or no credit	Student signature	before Jan. 31 (5pm)
Withdraw from an intensive course before the withdrawal deadline	Student signature	Feb. 1 – April 1 (5pm)
Late Add Form	Submi	t to Registrar (SCB 5005)
Purpose:	Approval Signatures Required:	Dates:
Add a course after the add deadline but before census date	Student and instructor signatures	Jan. 22 – Jan. 31 (5pm)
Post-Census Date Add Petition	Visit CLAS Advising (NC 1030) for more information	
Purpose:	Approval Required:	Dates:
Petition to add one or more full-semester courses after census date	Submitted petitions are reviewed by	after Jan. 31
(verifiable documentation required)	the CLAS Assistant Dean	
Late Withdrawal Petition	Submit to	CLAS Advising (NC 1030)
Purpose:	Approval Signatures Required:	Dates:
Petition to late-withdraw from a course after the withdrawal deadline but before the late withdrawal deadline	Student and instructor signatures	April 2 – May 2 (5pm)
Petition to late-withdraw from <u>all courses</u> in the semester after the withdrawal	Student signature	April 2 – May 2 (5pm)



CLAS Academic Advising Office • NC1030 • 303-315-7100

	Academic Calendar			
January 16	Beginning of Semester – First day of classes.			
January 21 (11:59 pm)	Add Deadline – Last day to add or waitlist a course using UCDAccess. After the add deadline but before census date, instructor permission on a Late Add Form is required to add courses.			
January 22 (11:59 pm)	Drop Deadline – Last day to drop a course without \$100 drop fee, including section changes (i.e., changing to a different section of the same course). Students may drop courses using UCDAccess.			
	No Adding of Courses is Permitted Today			
	Waitlists Purged – All waitlists are eliminated today. Students should check their schedule in UCDAccess to confirm the courses in which they are officially enrolled. Canvas does not reflect official enrollment.			
January 31 (5 pm) Census Date	Final Add Deadline (Instructor Permission Required) Last day to add full-semester courses. To add a full-semester course between the first add deadline and census date, instructor permission on a Late Add Form is required. Students may submit a completed Late Add Form to the Registrar's Office (SCB 5005). After census date, a written petition, verifiable documentation, and dean's approval via CLAS Advising (NC 1030 – 303-315-7100) are required to add a full-semester course. If a student's post-census date add petition is approved, the student will be charged the full tuition amount. College Opportunity Fund (COF) may not apply to courses added late, and these credits may not be deducted from students' lifetime hours. Final Drop Deadline Last day to drop full-semester courses with a financial adjustment. Each course dropped, including section changes, between the first drop deadline and census date generates a \$100 drop fee. Students may drop courses in UCDAccess. After census date, withdrawal from courses appears on transcripts with a grade of "W," and no financial adjustment is made. After census date but before the withdrawal deadline, students may withdraw from full-semester courses using UCDAccess (instructor permission is not required).			
	Graduation Application Deadline Last day to apply for graduation. Undergraduates are expected to make an appointment to see their academic advisors before census date to apply for graduation. Graduate students must complete the Intent to Graduate and Candidate for Degree forms. Pass/Fail, No Credit Deadline – Last day to request No Credit or Pass/Fail grade for a course using a Schedule Adjustment Form.			
March 19 – 25	Spring Break – No classes. Campus open.			
April 1 (11:59 pm)	Withdrawal DeadlineAfter census date, students may withdraw from full-semester courses using UCDAccess (instructor permission is not required). To withdraw from an intensive course, students may use a schedule.adjustment Form .Withdrawal from courses appears on transcripts with a grade of "W" and no financial adjustment is made.After the withdrawal deadline but before the late withdrawal deadline, students may late-withdraw by submitting a Late Withdrawal Petitionto CLAS Advising (NC 1030 – 303-315-7100). Contact CLAS Advising (NC 1030 – 303-315-7100) for more information.After census date, students withdrawing from a course with co-requisite(s) before or by the withdrawal deadline must withdraw from the course and co-requisite(s). After the withdrawal deadline, until the late withdrawal deadline, students may be able to withdraw from a course or co-requisite(s) based on instructor permission and approval of a <a href="https://www.schedule.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.adjustment.</th>			
May 2 (5 pm)	Late Withdrawal DeadlineLast day to petition to late-withdraw from one or more full-semester courses. Students may petition to late-withdraw by submitting aLate Withdrawal Petitionto CLAS Advising (NC 1030 – 303-315-7100). If petitioning to late-withdraw from individual courses, instructorsignatures are required. If petitioning to late-withdraw from the entire semester, instructor signatures are not required. Contact CLASAdvising (NC 1030 – 303-315-7100) for more information.After the withdrawal deadline, until the late withdrawal deadline, students may be able to withdraw from a course with co-requisite(s)based on instructor permission and approval of a Late Withdrawal Petition.After the late withdrawal deadline (or after grades are posted, whichever is sooner), only retroactive withdrawals are considered andverifiable documentation is required. Contact CLAS Advising (NC 1030 – 303-315-7100) for more information.			
May 7 – 12	Finals Week			
May 12	End of Semester			
	Commencement Ceremony			
May 17	Final Grades Available – Official grades available in UCDAccess and transcripts (tentative). Canvas does not display final grades.			
June 22	Degrees Posted – Degrees posted for graduating students on transcripts.			

Calculus II (MATH 2411) SPRING Schedule			
29 Episodes (105 minutes each)			
Week#	Mon/Wed		
1	17-Jan	5.5 & 6.1 (for Physics)	
2	22-Jan	7.8	
	24-Jan	8.1	
3	29-Jan	8.2	
	31-Jan	8.3	
4	5-Feb	8.4	
	7-Feb	8.5	
5	12-Feb	8.6	
	14-Feb	9.1	
6	19-Feb	Review	
	21-Feb	TEST #1	
7	26-Feb	9.2	
	28-Feb	9.3 & 9.4	
8	5-Mar	7.1 & 7.2	
	7-Mar	7.3	
9	12-Mar	7.4	
	14-Mar	7.5	
10	26-Mar	7.6 & 7.7	
	28-Mar	7.9	
11	2-Apr	6.2 & 6.3	
	4-Apr	Review	
12	9-Apr	TEST #2	
	11-Apr	6.4 & 6.5	
13	16-Apr	6.6 & 6.7	
	18-Apr	6.7 & 6.8	
14	23-Apr	6.9 & 6.10 (lightly)	
	25-Apr	10.1 & 10.2	
15	30-Apr	10.3	
	2-May	Review	
	5-May	SATURDAY Unif. Final (9am-12n)	